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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,044	07/26/2003	David A. Jackson	66396-059	8751

7590   07/17/2009
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ART UNIT	PAPER NUMBER
3661	

MAIL DATE	DELIVERY MODE
07/17/2009	PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte DAVID A. JACKSON, MICHAEL J. ROBB
and PATRICK B. O'MAHONY

_____

Appeal 2009-001144
Application 10/628,044
Technology Center 3600

_____

Decided:[1] July 17, 2009

_____

Before LINDA E. HORNER, JOHN C. KERINS and
STEVEN D.A. McCARTHY, *Administrative Patent Judges.*

McCARTHY, *Administrative Patent Judge.*

DECISION ON APPEAL

---

1   STATEMENT OF THE CASE

2   The Appellants appeal under 35 U.S.C. § 134 (2002) from the

3 Examiner's decision finally rejecting claims 1, 9, 15 and 24-26 under 35

4 U.S.C. § 102(e) (2002) as being anticipated by Larson (US 6,370,455 B1,

5 issued Apr. 9, 2002); and finally rejecting claims 2-8, 10-14 and 16-23 under

6 35 U.S.C. § 103(a) (2002) as being unpatentable over Larson and Jackson

7 (US 5,809,658, issued Sep. 22, 1998). We have jurisdiction under 35 U.S.C.

8 § 6(b) (2002).

9   We REVERSE.

10   Claim 9 is typical of the claims on appeal:

11
12   9.   A method of diagnosing a
13   malfunction during the operation of an instrument
14   that gathers and analyzes real-time wheel
15   alignment data comprising:
16   receiving real-time wheel alignment data
17   from at least one information-gathering device;
18   storing the real-time wheel alignment data in
19   a memory device;
20   re-playing the stored, real-time wheel
21   alignment data; and
22   analyzing the re-played data to diagnose a
23   malfunction.
24

25   Independent claims 1 and 26 recite a data replay system in

26 communication with a memory device for playing back real-time data

27 associated with a vehicle, and with an instrument, after the real-time data is

28 gathered. Independent claim 6 recites a play-back control for causing a

29 display device to selectively display images and analysis data to a service

30 technician in response to activation of the play-back control after the

1   occurrence of a malfunction. Independent claim 15 recites playback means

2   for re-playing stored, real-time wheel alignment data. Independent claims

3   21-23 recite a play-back control or play-back control means for causing a

4   display device or means to selectively display images or analysis data

5   generated based on the images. Independent claim 25 recites a play-back

6   control device for causing a display device to selectively display sensed

7   signals stored in a data storage device. Independent claim 24 includes

8   means for replaying stored, real-time data associated with the operations of a

9   vehicle test instrument.

10

11   ISSUES

12   The Appellants contend that Larson fails to disclose playing back real-

13   time data after the data is gathered. (Br. 14-15.) The Appellants further

14   contend that the teachings of Jackson fail to make up this deficiency. (Br.

15   15.) This appeal turns on two issues:

16   Have the Appellants shown that the Examiner erred in

17   finding that Larson discloses playing back real-time wheel

18   alignment data after the data is gathered?

19   Have the Appellants shown that the Examiner failed to

20   articulate reasoning with some rational underpinning sufficient

21   to support the conclusion that one of ordinary skill in the art

22   would have had reason to play back real-time wheel alignment

23   data in a system or method which diagnoses malfunctions after

24   the data is gathered?

1   FINDINGS OF FACT

2   The record supports the following findings of fact ("FF") by a

3   preponderance of the evidence.

4   1.   The ordinary meaning of the term "real-time data" is data that

5   recreates events that occur in real-time. (*See* Br. 13.)

6   2.   Jackson discloses wheel alignment apparatuses for a motor

7   vehicle. (Jackson, col. 6, ll. 52-56.)

8   3.   Each of Jackson's individual wheel alignment apparatuses

9   includes a video camera *30* which is in electrical communication with a

10   computer *32*. (*Id.*)

11   4.   Jackson's video camera *30* transmits real-time images of targets

12   placed on the wheels of a vehicle for processing by the individual wheel

13   alignment apparatus computer *32*. (*See* Jackson, col. 8, ll. 14-16.)

14   5.   Jackson's individual wheel alignment apparatus computer *32*

15   processes the images and performs calculations to determine the true

16   orientation of the wheels relative to the view paths of the video camera *30*.

17   Jackson's computer *32* displays the results of the calculations. (Jackson, col.

18   8, ll. 17-32.)

19   6.   Jackson does not disclose displaying detected images.

20   7.   Larson discloses providing a service computer *16* at a remote

21   location *10B* with access to one or more individual vehicle wheel alignment

22   system computers *12A-12D* similar to the individual wheel alignment

23   apparatus computers disclosed by Jackson. Larson discloses providing the

24   service computer *16* access to the individual vehicle wheel alignment system

25   computers *12A-12D* for several purposes, including providing remote

1   diagnostic procedures on the individual vehicle wheel alignment system

2   computers *12A-12D*. (Larson, col. 5, l. 60 – col. 6, l. 2 and Fig. 1A.)

3   8.   Larson's service computer *16* receives data from the individual

4   vehicle wheel alignment system computers *12A-12D*. (Larson, col. 7, l. 65 –

5   col. 8, l. 11.)

6   9.   The passages of Larson cited by the Examiner do not describe

7   the transmission of real-time data, such as image data, from the individual

8   vehicle wheel alignment system computers *12A-12D* to the service computer

9   *16*.

10   10.   The data received and stored by Larson's service computer *16*

11 includes current program log files for performing error detection. (Larson,

12 col. 8, l. 29-34.)

13   11.   The passages of Larson cited by the Examiner do not describe

14 the contents of the current program log files. The log files do not necessarily

15 contain data that recreates events that occur in real-time.

16   12.   Larson discloses that the received information from the wheel

17 alignment computers *12A-12D* may be utilized by the service computer

18 software in the generation of reports or other summary data compilations for

19 presentation to an operator on a display screen or printer. (Larson, col. 8, ll.

20 35-39.)

21   13.   The passages of Larson cited by the Examiner do not disclose

22 the content or format of the reports or other summary data compilations

23 presented to the operator on the display screen. The reports or other

24 summary data compilations do not necessarily contain data that recreates

25 events that occur in real-time.

1   14.   Neither Jackson nor Larson discloses playing back real-time

2   wheel alignment data after the data is gathered.

3

4   PRINCIPLES OF LAW

5   A claim under examination is given its broadest reasonable

6   interpretation consistent with the underlying specification. *In re Am. Acad.*

7   *of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In the absence of

8   an express definition of a claim term in the specification, the claim term is

9   given its broadest reasonable meaning in its ordinary usage as the term

10   would be understood by one of ordinary skill in the art. *In re ICON Health*

11   *& Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *In re Morris*, 127

12   F.3d 1048, 1054 (Fed. Cir. 1997). Our reviewing court disfavors any claim

13   interpretation which renders language in the claim superfluous. *Stumbo v.*

14   *Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007).

15

16   ANALYSIS

17   The Appellants do not define the term "real-time data" in the

18   Specification. Nevertheless, the Appellants' proffered definition of the term,

19   namely, data that recreates events that occur in real-time, most closely

20   corresponds to both the ordinary usage of the term (*see* FF 1), and to the

21   usage of the term in the Specification. Defining the term sufficiently

22   broadly to include any data gathered in real-time or relating an event

23   observed in real-time would render the term superfluous, since, as the

24   Examiner points out (*see* Ans. 5), most data are gathered in real-time.

25   Therefore, the broadest reasonable interpretation of the term "real-time data"

26   is limited to data that recreates events that occur in real-time.

1   Neither Jackson nor Larson discloses playing back real-time wheel

2 alignment data after the data is gathered. Although Larson discloses storing

3 some data, such as current program log files (FF 10), Larson does not

4 necessarily disclose storing real-time wheel alignment data. (FF 11.)

5 Although Larson discloses presenting reports or other summary data

6 compilations to an operator on the display screen (FF 12), Larson does not

7 necessarily disclose presenting real-time wheel alignment data on the display

8 screen. (FF 13.) Although Jackson discloses displaying the results of

9 calculations on a video display unit (FF 5), Jackson does not disclose

10 *playing back* data or images after the data or images are gathered. (*See* FF 6

11 and 11.)

12   Larson does not disclose playing back real-time wheel alignment data.

13 Since Jackson does not disclose playing back real-time data either, the

14 Examiner's reasoning that it would have been obvious "that *at least part of*

15 *the real time data transmitted and received by Larson et al.* (also using a

16 typical wheel alignment system) was obtained by optical means and

17 presented during the analysis as images" (Ans. 4 [emphasis added]), lacks

18 rational underpinning in the evidence on which the Examiner relies.

19

20   CONCLUSIONS

21   The Appellants have shown that the Examiner erred in finding that

22 Larson discloses playing back real-time wheel alignment data after the data

23 is gathered. Therefore, the Appellants have shown that the Examiner erred

24 in rejecting claims 1, 9, 15 and 24-26 under § 102(e) as being anticipated by

25 Larson.

1   The Appellants have shown that the Examiner failed to articulate

2   reasoning with some rational underpinning sufficient to support the

3   conclusion that one of ordinary skill in the art would have had reason to play

4   back real-time wheel alignment data in a system or method which diagnoses

5   malfunctions after the data is gathered. Therefore, the Appellants have

6   shown that the Examiner erred in rejecting claims 2-8, 10-14 and 16-23

7   under § 103(a) as being unpatentable over Larson and Jackson.

8

9   DECISION

10   We REVERSE the Examiner's decision rejecting claims 1-26.

11

12   REVERSED

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14

15   mls

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